State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
May 11, 2005

ITEM: 8

SUBJECT: **PUBLIC HEARING: TOTAL MAXIMUM DAILY LOADS FOR COPPER, LEAD AND ZINC IN CHOLLAS CREEK, TRIBUTARY TO SAN DIEGO BAY, AND UPDATE TO THE BASIN PLAN TO REFERENCE BOTH THE NATIONAL TOXICS RULE AND THE CALIFORNIA TOXICS RULE IN THE SECTION ON TOXIC POLLUTANTS (Tentative Resolution No. R9-2005-0111).** (*Jimmy Smith*)

PURPOSE: To receive testimony and comments on 1) appropriate TMDLs and wasteload allocations for copper, lead, and zinc in Chollas Creek, tributary to San Diego Bay, and 2) a proposed revision to incorporate by reference USEPA water quality criteria for toxic pollutants established in the California Toxics Rule (CTR). At a subsequent meeting, the Regional Board may adopt an amendment to the Water Quality Control Plan for the San Diego Basin (9) (Basin Plan) to incorporate the TMDLs and to incorporate by reference the CTR water quality criteria.

PUBLIC NOTICE: Federal Clean Water Act (CWA) regulations [40 CFR 25.5] require the Regional Board to provide notice of a proposed Basin Plan amendment to all interested parties at least 45 days in advance of the public hearing. The State Board's California Environmental Quality Act (CEQA) implementation regulations [23 CCR 3777] require the Regional Board to provide to the public a Notice of Filing of a written report on any standard, rule, regulation, or plan proposed for board approval or adoption at least 45 days prior to board action. The Notice of Public Hearing for this Basin Plan amendment and Notice of Filing of the written technical report (Supporting Document 1) were provided by newspaper publication in the San Diego Union Tribune and by email and regular mail distribution to interested parties on March 28, 2005, 45 days in advance of the public hearing scheduled for May 11, 2005. The draft technical report (including the draft Resolution and draft Basin Plan amendment) was available to the public on our website also on March 28, 2005 (Supporting Documents 2, 3 &4).

DISCUSSION: *Chollas Creek Metals TMDL*

Chollas Creek is an urban coastal stream in southern San Diego County, tributary to San Diego Bay (Supporting Document 5). Chollas Creek was placed on the Clean Water Act (CWA) section 303(d) List of Water Quality Limited Segments in 1996 for the metals cadmium,[1] copper, lead and zinc. The Regional Board has established Total Maximum Daily Loads (TMDLs) for copper, lead, and zinc in Chollas Creek as required by the CWA for water quality limited segments. The technical basis for the TMDLs, Implementation Plan and Environmental Review of the most reasonably foreseeable methods of compliance with the TMDLs are discussed in the Technical Report.

The purpose of these TMDLs is to reduce copper, lead and zinc concentrations in Chollas Creek as needed to attain the water quality objectives for toxicity and to restore the "warm freshwater habitat" (WARM) and "wildlife habitat" (WILD) beneficial uses of Chollas Creek.

Because aquatic toxicity is the most significant adverse effect of copper, lead and zinc and because aquatic toxicity is a function of water column concentrations, these TMDLs are concentration-based, rather than mass emission-based. When additional information is available to calculate mass-based TMDLs, this project will be updated. The Numeric Targets are set equal to the CTR water quality criteria for the protection of freshwater aquatic organisms from copper, lead and zinc. Since metal toxicity varies with the hardness of the water, the Numeric Targets are set equal to the formulas that establish the CTR criteria. This ensures that the CTR criteria are appropriately applied throughout space and time. The concentration-based TMDLs (Loading Capacity), Waste Load Allocations (for point sources) and Load Allocations (for nonpoint sources) are applied equally to all metal discharge sources in the Chollas Creek watershed. All allocations are set at 90 percent of the Numeric Targets resulting in a copper, lead and zinc allocation equal to 90 percent of the CTR criteria. These allocations include an explicit 10 percent margin of safety to account for uncertainties in the TMDL analysis. These concentration-based TMDLs and allocations apply year-round and will be protective during all flow conditions and seasons.

Urban runoff is the primary source of metals to Chollas Creek. As dischargers of urban runoff to Chollas Creek, the cities of San Diego, Lemon Grove, and La Mesa, the San Diego Unified Port

[1] Cadmium is recommended for de-listing.

District, County of San Diego, the California Department of Transportation (CalTrans), and the U.S. Navy (Navy) are responsible for implementation of this TMDL. With the exception of the Navy, these entities are all regulated under Waste Discharge Requirements (WDRs) for Municipal Separate Storm Sewer Systems (MS4s) discharges. The urban stormwater discharges from the Navy community facilities on Naval Station San Diego could be regulated by enrolling the facility in the statewide WDRs for small MS4s.

Stormwater discharges from certain industrial facilities and groundwater extraction discharges could also contribute metals to Chollas Creek. Industrial stormwater discharges are regulated under statewide general WDRs, and groundwater discharges are regulated under Regional Board general WDRs.

The TMDLs will be implemented by amending the appropriate WDRs that regulate stormwater and groundwater extraction discharges to be consistent with the Wasteload Allocations (WLA) and compliance schedule of this TMDL. Dischargers have seven years to implement BMPs and other actions to ensure that metals concentrations in their discharges do not exceed the WLAs and therefore do not contribute to an exceedance of the loading capacity of the creek. Source control and structural and non-structural BMPs are likely mechanisms to control metal discharges to Chollas Creek. Monitoring will be required to assess the efficacy of these measures, but is not likely to constitute an additional financial burden upon the dischargers. The majority of the necessary monitoring is already taking place under Order No. R9-2004-0227 that resulted from the implementation of the Chollas Creek TMDL for Diazinon.

The scientific basis of this TMDL has undergone external peer review pursuant to Health and Safety Code section 57004. Staff has considered and responded to all comments submitted by the peer review panel.

Incorporation of California Toxics Rule by Reference

In May 2000 the U.S. Environmental Protection Agency (USEPA) promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. The rule establishing these criteria is referred to as the California Toxics Rule, or CTR. The USEPA promulgated the CTR to fill a gap in California water quality standards that was created in 1994 when a State court

overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. California remains in the National Toxics Rule (NTR) promulgated in 1992 for certain waters and pollutants. Currently the Basin Plan only refers to the 1992 NTR, and not to the CTR. The Basin Plan needs to be amended to also incorporate the CTR by reference into the section on Toxic Pollutants.

Written responses to comments received before the close of the public comment period will be provided to the public. The fifth in a series of public workshops on the proposed TMDLs was conducted on April 28, 2005. At a subsequent meeting, the Regional Board may amend the Basin Plan to incorporate the TMDLs and incorporate the CTR water quality criteria by reference by adopting tentative Resolution No. R9-2005-0111 (Supporting Document 2).

KEY ISSUES:

1. Sufficient data are not available to change the Water-effect Ratio (WER) from the default value of one. When and if appropriate information is available, changing the WER should be considered in calculating the TMDL and WLA.
2. More data are needed to refine the watershed wash-off model in order to calculate a mass-based TMDL of metals for Chollas Creek.

LEGAL CONCERNS: None.

SUPPORTING DOCUMENTS:

1. Notice of Public Workshop and Notice of Public Hearing and Filing, dated March 28, 2005.
2. Tentative Resolution No. R9-2005-0111 and Attachment A, Draft Basin Plan Amendment.
3. Technical Report.
4. Appendices A through L to the Technical Report.
5. Location Map of Chollas Creek.
6. Comment Letter Received as of April 27, 2005.

RECOMMENDATION(S): Close the public comment period on the Chollas Creek TMDLs and on the update to the Basin Plan to incorporate by reference both the National Toxics Rule and the California Toxics Rule in the section on Toxic Pollutants.